solutions of the sesqui-chloride, sesqui-bromide, or sesqui-iodide of iron are converted into the corresponding proto-compounds of iron, by combining with iron, the heat in all cases is the same for the same quantity of iron dissolved.

The method by which these numerical results were obtained, and the apparatus employed, are minutely described in the original communication.

Dr. Kane inquired how far he considered the final results obtained by Dr. Andrews to affect the ideas of thermo-chemical combination, founded on the experiments of Despretz and Dulong?

Dr. Apjohn stated that the results of Dr. Andrews were quite opposed to their experiments, as he found the quantities of heat not to bear any relation to the atomic weight of the combining bodies.

The Secretary read a paper by the Rev. Edward Hincks "on the Chronology of the Eighteenth Dynasty of Manetho."

The object of this paper is to determine the period at which the eighteenth dynasty of Manetho flourished, by the recorded dates, in months of the wandering year, of facts, which must, from their nature, have occurred at known seasons of the solar year. Three such dates are brought forward: two of them relating to the time of the commencement of campaigns; and the third, to that of the inundation: and they all concur in depressing the epochs of the eighteenth dynasty about 350 years below those, which the Champollions and Rosellini have adopted. An approximation to the dates of the accession of many monarchs of the dynasty is attempted. For example, the year B. C. 1278 is fixed upon as very nearly, if not exactly, that of the accession of Amenothph III.

Mr. Mallet having become acquainted with the recent improvements effected by Mr. Bessemer in the art of glass-

making, for optical and other purposes, gave a short account of them to the Academy.

The improvements consist chiefly in—

1st. The use of platina bottoms to earthen melting pots, and heating these in improved furnaces *from below*, so as to produce circulation in the fluid glass.

2nd. In preserving the liquid glass from all contamination from without by "tears," &c. and from the dome of the furnace, as well as from deoxidation of the lead salts by contact of carbon.

3rd. In an improved mode of cutting off, by a platina blade, the upper portion of the fluid glass, without disturbance of the remainder; thus separating the whole of the impure dross at top, which was heretofore stirred down into the mass just previous to casting.

4th. In a beautiful and effective mode of removing the air bubbles, or "seeds," as they are called, from the liquid glass, by placing the ignited glass pot of liquid metal within an exhausted receiver, so contrived that it can be rapidly placed within, and withdrawn from the vacuum vessel.

Mr. Mallet was not aware that as yet any specimen of glass prepared by these improved processes had been wrought for any optical purpose, the inventor's efforts having been as yet principally directed to the manufacture of plate glass; but he considered that the practical nature of these improvements, and their capability of being applied upon a large scale, gave good hope of their extension to the making of optical glasses also.

Rev. Dr. Robinson made some remarks with reference to Mr. Faraday's experiments on the manufacture of glass for optical purposes, and described the processes adopted at Munich in selecting the portions of glass of which lenses are formed.